

California Regulation for the
Mandatory Reporting of Greenhouse Gas Emissions

**2012 GHG Reporting for
Fuel Suppliers**

Applicability and Reporting Guidance
(Sections 95121 and 95122)

February 21, 2013

Presentation Slides Available Here:

<http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>

Outline

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- Suppliers of Natural Gas, Natural Gas Liquids (NGLS), and Liquefied Petroleum Gas (LPG)
 - Applicability
 - Reporting Issues
 - Data monitoring and verification
- Q&A

Introduction

§95101(c):

- Contains rule applicability requirements for suppliers of transportation fuels, natural gas, NGLs, and LPG

§95121:

- Contains reporting requirements for transportation fuel suppliers including refineries producing LPG
- References 40 CFR Part 98, Subpart MM

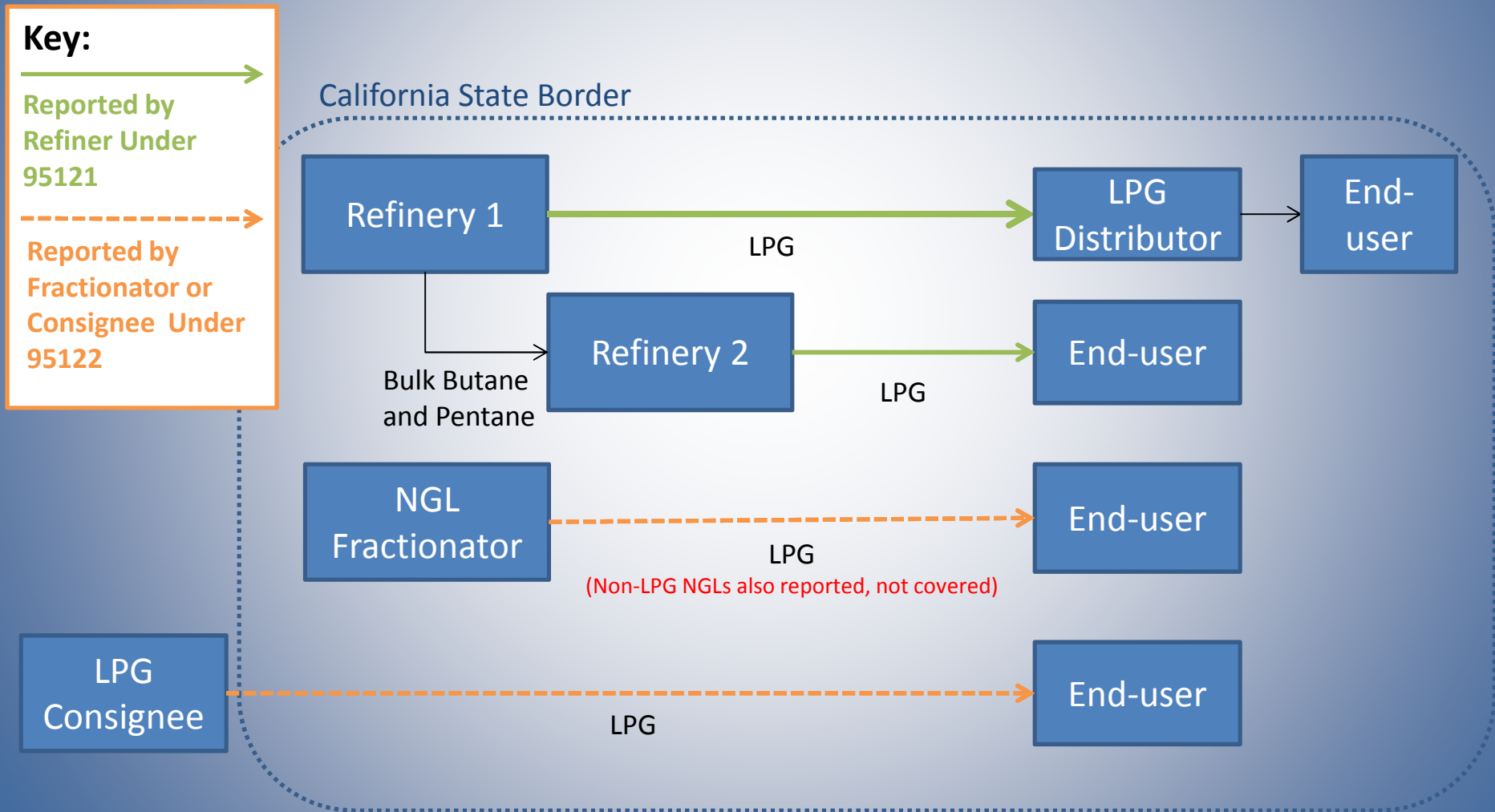
§95122:

- Contains reporting requirements for suppliers of natural gas and NGL fractionators that supply NGLs and/or LPG
- References 40 CFR Part 98, Subpart NN

2012 MRR Revisions

- §95101(c) – added CNG/LNG consignees - **Effective for 2013 data reported in 2014**
- §95121 (no substantive changes)
 - Clarified language, incorporated fuel table to improve readability, added definition for ‘Refiners’
- §95122
 - Clarified language to improve readability
 - Added reporting requirements for CNG/LNG consignees (importers) - **Effective for 2013 data reported in 2014**
- For a complete list of MRR Revisions and Applicability for 2012 data, refer to guidance:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance-docs.htm>

Who Reports Emissions from LPG



Suppliers of Transportation Fuels (Section 95121)

Definitions

- Position Holder: §95102(a)(344)
 - *An entity that holds an inventory position in transportation fuel at a CA fuel terminal*
- Refiner *(new definition)*: §95102(a)(394)
 - *An entity that delivers transportation fuel to end-users in CA that were produced at an entity or entity-subsidary owned refinery*
- Enterer: §95102(a)(152)
 - *An entity that imports transportation fuel and is the importer of record under federal customs law or the owner of the fuel upon entry into CA.*

Fuel Suppliers are:

- Position holders delivering fuel across terminal racks
- Refiners delivering fuel across racks at refineries and pipeline terminals as the position holder
- Enterers (importers) importing fuel outside the bulk transfer/terminal system

Applicability

- Produce, import and/or deliver an annual quantity of transportation fuel that, if completely oxidized, would result in the release of greater than or equal to 10,000 MT CO₂e in California
- All refiners that produce liquefied petroleum gas (LPG) must report regardless of who holds the last inventory position or quantity

Transportation Fuels

Fuel	
CBOB—Summer	Distillate Fuel Oils
Regular	Distillate No. 1
Midgrade	Distillate No. 2
Premium	Liquefied Petroleum Gas (LPG)
CBOB—Winter	Ethane
Regular	Ethylene
Midgrade	Propane
Premium	Propylene
RBOB—Summer	Butane
Regular	Butylene
Midgrade	Isobutane
Premium	Isobutylene
RBOB—Winter	Pentanes Plus
Regular	Biomass-Derived Fuel
Midgrade	Ethanol (100%)
Premium	Biodiesel (100%, methyl ester)
	Rendered Animal Fat

Gasoline Blendstocks

- Gasoline Blendstocks
 - RBOB is equivalent to CARBOB
 - CBOB is generally not legal for use as a vehicle fuel in California, so CBOB emissions should be zero for California fuel suppliers
 - Ethanol (biomass derived fuel): typically mixed with RBOB at the fuel terminal to produce E10 motor gasoline (10% ethanol, 90% RBOB)
- All blendstocks must be reported separately
 - Example: 100 barrels (bbls) of E10 would be reported as 90 bbl RBOB, 10 bbl ethanol

Diesel and Biodiesel

- Diesel Fuel
 - Only fuel that meets the definition of diesel (distillate) # 1 or # 2 is reported
 - Includes both dyed and undyed
- Biodiesel (biomass-derived fuel)
 - Biodiesel is produced for distribution as pure biodiesel (B100) or biodiesel blends such as B20 (20% biodiesel, 80% fossil derived diesel).
 - All biodiesel, whether blended or unblended, must be reported by the position holder or producer delivering the fuel across the rack.

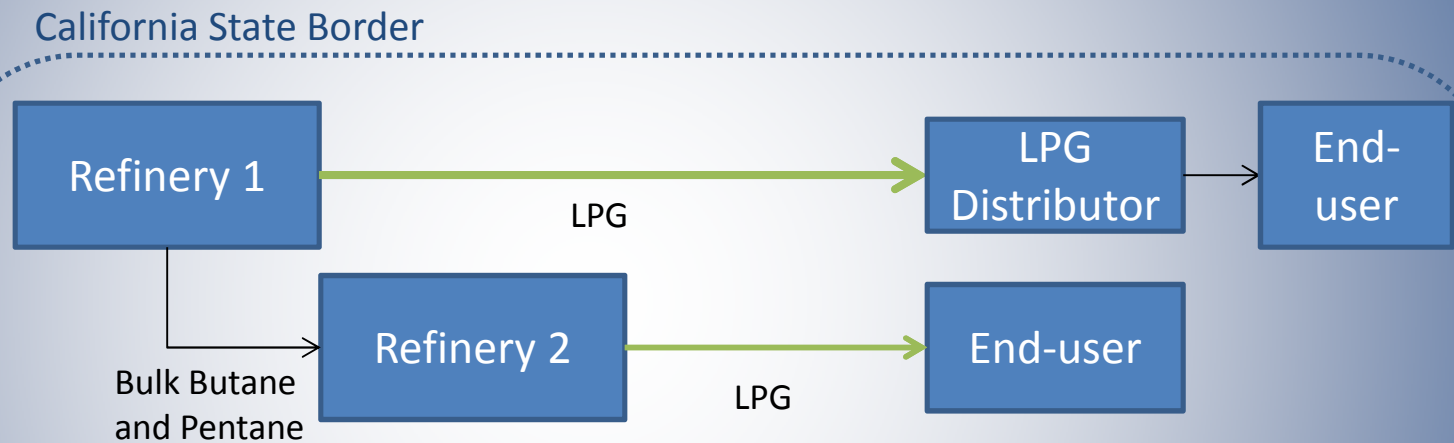
Liquefied Petroleum Gas

- Refiners must report LPG produced and delivered in California as described in §95121
- Refiners should only report LPG components that are produced and sold or delivered in mixtures that could be used as a fuel by an end-user.
 - Bulk Butanes/Pentanes etc. sold to other refineries for use as feedstock do not fit the definition of LPG and are not reported

Who Reports Emissions from LPG

Key:

Reported by Refiner Under 95121



Emissions Reporting Guidance

- Position Holders: Must report all transportation fuels that are delivered across the rack at California terminals
 - Fuels that change ownership upstream of a terminal rack (e.g. pre-terminal or inter-terminal transactions) are reported by the position holder that has ownership of the fuel as it is delivered across the rack.
- Enterers: *Only* required to report fuels imported outside of the bulk transfer/terminal system.
 - All imported fuel delivered to a California fuel terminal is reported by the position holder, not the enterer (unless they are the same entity)

Emissions Reporting Guidance

- Refiners: Report all fuel distributed across a CA terminal rack, plus fuel delivered via bulk transfer to any unlicensed entities (i.e. not a BOE licensed fuel supplier)
- Two approaches to reporting:
 - 1) *Refiner* parent company reports fuel delivered from all terminals, including terminals on-site at company or subsidiary owned refineries
 - 2) *Refineries* include fuel delivered from on-site terminals under their GHG report, and the Refiner parent company reports fuel delivered from all other terminals where positions are held

Bulk Transfer to Other Fuel Suppliers

- Refiners commonly trade (buy/sell) transportation fuel products in bulk with other fuel suppliers
- Refiners do not report fuel delivered in bulk via pipeline to other fuel suppliers
 - The refiner must confirm that the purchaser is a licensed fuel supplier with the California Board of Equalization (BOE).
 - If this cannot be confirmed, the refiner must report the fuel delivered in bulk to the unlicensed entity
 - Contact ARB staff for assistance determining BOE status if it is unclear

Fuel Supplier Data vs. Refinery Product Data

- Fuel volumes reported under §95121 are used to calculate emissions from combustion of fuel by California end-users
- Refinery product volumes (including transportation fuels) are reported under §95113 and used for allowance allocation
- Product data is not equivalent to fuel volume data reported under §95121.

Data Monitoring and Meter Accuracy

- Required to have GHG Monitoring Plan, as described in §95105(c)
 - Suppliers must meet 40 CFR §98.3(g)(5) requirements, not subject to §95105(c)(1)-(10)
- Most meters used by fuel suppliers are financial transaction meters that likely meet calibration exemption criteria in §95103(k)(7) and §95121(c)(1)
- Reporter must demonstrate that meters meet exemption criteria during verification
- Non-exempt meters must meet all calibration and accuracy requirements in § 95103(k)

Verification

- Fuel suppliers are required to obtain verification services if reporting > 25,000 MT CO₂e
 - Verification team is required to have at least one “transactions sector” specialist
 - A list of verification bodies and qualified verifiers is available here:
http://www.arb.ca.gov/cc/reporting/ghg-ver/arb_vb.htm.

Questions?

Suppliers of Natural Gas, Natural Gas Liquids, and Liquefied Petroleum Gas (Section 95122)

February 21, 2013

Applicability

- Natural gas suppliers that produce, import or deliver an annual quantity of gas/LPG that, if completely combusted, would result in $\geq 10,000$ MT CO₂e, including:
 - Gas utilities: Public Utility Gas Corporations (PUGCs) and Publicly Owned Gas Utilities (POGUs)
 - Operators of intrastate pipelines
 - Operators of interstate pipelines
 - Consignees of LPG
- Natural gas liquid (NGL) fractionators, regardless of quantity

Emissions Reporting – NG Suppliers

- Gas Utilities (PUGCs and POGUs) must report emissions from:
 - Gas received at city gate (or state border), **minus**
 - Net gas re-delivered to other gas utilities or pipelines, **minus**
 - Net gas put on storage
 - Gas received from local production or taken out of storage will be *added* to the reported volume
 - Also must report volume and customer data for natural gas delivered to each end-user registering supply equal to or greater than 460,000 Mscf (~25,000 MT CO₂e)
 - This information is used by ARB to calculate each NG suppliers 'covered emissions'

Emissions Reporting – NG Suppliers

- *Intrastate* Pipelines must report emissions from:
 - The total amount of gas delivered to all entities (local utilities, other pipelines, or end-users)
 - Similar to other gas suppliers, must report volume and customer data for natural gas delivered to each end-user registering supply equal to or greater than 460,000 Mscf (~25,000 MT CO₂e).
- *Interstate* Pipelines must report only :
 - Gas volume and customer data as specified in section 95122(d)(3)
 - No emissions data is reported, therefore verification is not required for *interstate* pipelines
 - Data is similar to what is required to be reported under the Fee Reg, however interstate pipelines are nonetheless required to report under 95122 if the pipeline delivers into California a quantity of gas exceeding the reporting threshold.

NG Supplier Covered Emissions Calculation

- Covered emissions for a NG supplier are equal to:
 - Total emissions from all fuel delivered to end users as calculated as specified in §95122, **minus**
 - The sum of fuel that is delivered to other covered facilities in California.
- The covered emission calculation is performed by ARB staff
 - See §95852(c) of the Cap and Trade regulation for more information on the compliance obligation calculation

Emissions Reporting – NGL Fractionators

- NGL fractionators report the following NGL products and LPG products produced and supplied.

Natural Gas Liquids	LPG Components
Ethane	LPG – Ethane
Propane	LPG – Ethylene
Butane	LPG – Propane
Isobutane	LPG – Propylene
Pentanes Plus	LPG – Butane
Liquefied Petroleum Gas (reported by component)	LPG – Butylene
	LPG – Isobutane
	LPG – Isobutylene
	LPG - Pentanes Plus

- If the product leaving the facility meets the definition of LPG, it is reported by individual component.

NGL or LPG?

- LPG is defined as a mix of NGL components, primarily propane and butane, that is distributed for use as a fuel (see §95102(a)(266)).
 - Includes products sold as LPG (grades HD-5 and HD-10), as well as other component mixtures meeting the definition
- Only emissions from LPG components count as covered emissions.

Examples of NGL/LPG Reporting

- Example: Fractionator produces and delivers the following:
 - 1,000 bbl of bulk ethane → **reported as NGL (ethane)**
 - 5,000 bbl of natural gasoline → **reported as NGL (pentanes plus)**
 - 100,000 bbl of HD-5 LPG (96% propane, 4% propylene) → **reported as 96,000 bbl of LPG – propane, and 4,000 bbl of LPG - propylene**
 - 10,000 bbl of fuel mix (50% propane, 40% butane, 10% isobutene) → **reported as 5,000 bbl of LPG – propane, 4,000 bbl of LPG - butane, and 1,000bbl of LPG – isobutene)**

NGL Fractionator Product Data Reporting

- All NGL fractionators are also required to report NGL product data under section 95156(d) of the MRR (subpart W of the Cal-eGGRT reporting tool).
- All NGL and LPG products are considered 'covered product data.'
- Product data is likely to be largely consistent with the data reported under section 95122

Emissions Reporting – LPG Consignees

- A California consignee is an entity that receives imported LPG
- California consignees must report:
 - LPG volumes by individual LPG component if the composition is provided by the producer.
 - ‘LPG’ using default the emissions factor if the LPG composition is not provided.

Data Monitoring and Meter Accuracy

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Questions?

Additional Training

- ARB sector-specific training (see link for times)
<http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm>
 - February 14th - Electricity Generation and Cogeneration
 - February 20th - Petroleum and Natural Gas Systems
 - February 21st - Fuel Suppliers – Transportation, NG, etc.
 - **February 28th - Refinery Product Data**
 - **March 26th - Electric Power Entities**
- Contact ARB staff as needed for questions

Key Reporting Dates

Date	Activity
February 1	Regulatory deadline: Due date for electric power entities to register specified facilities outside California
February 13	Public release of Cal e-GGRT
April 10	Regulatory deadline: Reporting deadline for facilities and suppliers of fuels and carbon dioxide, except when subject to abbreviated reporting
June 3	Regulatory deadline: Reporting deadline for electric power entities and those subject to abbreviated reporting
July 15	Regulatory deadline: Deadline for corrections to RPS Adjustment data required for electric power entity data reports
September 3	Regulatory deadline: Final verification statements due (emissions data and product data)

Resources

- Reporting Guidance: Applicability, Metering, Fuel Supplier Reporting
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm>
- Tool Training: Registration, Subparts
<http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm>
- Cal e-GGRT Main Help Page
<http://www.ccdsupport.com/confluence/display/calhelp/Home>
- U.S. EPA Detailed Sector Training Slides
<http://www.epa.gov/climatechange/emissions/training.html>
(use as a supplement to ARB summary slides)

GHG Reporting Contacts

Subject Matter	Contact
GHG Mandatory Reporting (General)	Dave Edwards , Manager 916.323.4887
Reporting Requirements, Stationary Combustion, Other Sectors (cement, glass, pulp and paper, etc.)	Patrick Gaffney 916.322.7303
Reporting Tool Registration and General Questions	Karen Lutter 916.322.8620
Electricity Generation and Cogeneration Facilities	Anny Huang 916.323.8475
Electricity Retail Providers and Electricity Marketers	Wade McCartney 916.327.0822
Fuel and CO ₂ Suppliers - Transportation Fuels, Natural Gas, LPG, CO ₂	Syd Partridge 916.445.4292
Petroleum Refineries, Hydrogen Plants, Oil & Gas Production	Byard Mosher 916.323.1185
Product Data – Refineries, and Oil & Gas	Joelle Howe 916.322.6349
Greenhouse Gas Report Verification	Renee Lawver , Manager 916.322.7062
Chief – Greenhouse Gas Emission Inventory Branch	Richard Bode , Chief 916.323-8413